In the Claims:

Please amend the claims as indicated.

1.   (Currently amended) An apparatus for managing multiple copy versions of a source volume, the apparatus comprising:

a replication record management module configured to maintain a current replication record descriptive of a current copy version of a source volume;

a pre-pairing record management module configured to maintain a future pre-pairing record descriptive of a future copy version of the source volume; ~~and~~

a copy record module configured to create a copy record from a pre-copy record, the pre-copy record comprising one of the current replication record and the future pre-pairing record[[.]];

a replication module configured to replicate the source volume on a target volume, create a new copy version of the source volume according to the copy record, and establish a new replication record descriptive of the new copy version of the source volume; and

the replication record management module is further configured to compare the new replication record to the current replication record and to break a copy pair for a removed source volume present in the current replication record, but not present in the new replication record.

2.   (Canceled)

3.   (Canceled)

-2-

4.   (Canceled)

5.   (Original) The apparatus of claim 1, wherein the replication record management module is further configured to maintain a previous replication record descriptive of a previous copy version.

6.   (Original) The apparatus of claim 1, wherein the pre-pairing record management module is further configured to maintain a previous pre-pairing record descriptive of a previous copy version.

7.   (Original) The apparatus of claim 1, further comprising a pre-pairing module configured to create the future pre-pairing record.

8.   (Original) The apparatus of claim 1, further comprising a target selection module configured to locate a target volume available for use to create a copy version of the source volume.

9.   (Original) The apparatus of claim 1, wherein the copy record module is further configured to verify the future pre-pairing record and to account for a change in one of a source pool and a target pool.

10.   (Original) The apparatus of claim 1, wherein the copy record module is further configured to verify the current replication record and to account for a change in one of a source pool and a target pool.

11.   (Currently amended) An apparatus for managing multiple copy versions of a source
        volume, the apparatus comprising:

        a replication record management module configured to maintain a ~~a~~
plurality of replication records, each replication record descriptive of a copy
version of a source volume;

        a pre-pairing record management module configured to maintain a
plurality of pre-pairing records, each pre-pairing record descriptive of a copy
version of the source volume; ~~and~~

        a copy record module configured to create a copy record from a pre-copy
record, the pre-copy record comprising one of the current replication record and
the future pre-pairing record;

        a replication module configured to replicate the source volume on a target
volume, create a new copy version of the source volume according to the copy
record, and establish a new replication record descriptive of the new copy version
of the source volume;

        the replication record management module is further configured to
compare the new replication record to the current replication record and
to break a copy pair for a removed source volume present in the current
replication record, but not present in the new replication record; and

        a record management module configured to dynamically manage the
plurality of replication records and pre-pairing records in response to a change in
the data copy environment.

12.   (Original) The apparatus of claim 11, wherein the change in the data copy
        environment comprises an addition of a source volume to a source pool.

13.   (Original) The apparatus of claim 11, wherein the change in the data copy environment comprises a removal of a source volume from a source pool.

14.   (Original) The apparatus of claim 11, wherein the change in the data copy environment comprises an addition of a target volume from a target pool.

15.   (Original) The apparatus of claim 11, wherein the change in the data copy environment comprises a removal of a target volume from a target pool.

16.   (Original) The apparatus of claim 11, wherein dynamically managing the plurality of replication records comprises verifying the current status of a volume in the data copy environment and updating a replication record in response to a change from a previous status of the volume.

17.   (Currently amended) A system for managing multiple copy versions of a source volume, the system comprising:

a̲A̶ storage subsystem configured to store backup data;

a backup manager configured to direct the storage subsystem to create a plurality of copy versions from a plurality of source volumes and to store backup information descriptive of each of the plurality of copy versions; and̶

a backup management apparatus configured to manage the plurality of copy versions and the backup information descriptive of each of the plurality of copy versions[[.]];

a replication record management module configured to maintain a current replication record descriptive of a current copy version of a source volume;

a pre-pairing record management module configured to maintain a future pre-pairing record descriptive of a future copy version of the source volume; and

a copy record module configured to create a copy record from a pre-copy record, the pre-copy record comprising one of the current replication record and the future pre-pairing record;

a replication module configured to replicate the source volume on a target volume, create a new copy version of the source volume according to the copy record, and establish a new replication record descriptive of the new copy version of the source volume; and

the replication record management module is further configured to compare the new replication record to the current replication record and to break a copy pair for a removed source volume present in the current replication record, but not present in the new replication record.

18.   (Original) The system of claim 17, wherein the backup manager further comprises a backup information module configured to store the backup information, the backup information comprising a replication record, a volume inventory, a copy pool inventory, and a dataset inventory.

19.   (Original) The system of claim 17, wherein the backup manager further comprises a backup information module configured to store the backup information, the

backup information comprising pre-pair record descriptive of a future copy version of one of the source volumes.

20.   (Currently amended) A computer readable storage medium comprising computer readable code configured to carry out a method for managing multiple copy versions of a source volume, the method comprising:

maintaining a current replication record descriptive of a current copy version of a source volume;

maintaining a future pre-pairing record descriptive of a future copy version of the source volume; ~~and~~

creating a copy record from a pre-copy record, the pre-copy record comprising one of the current replication record and the future pre-pairing record[[.]];

replicating the source volume on a target volume, creating a new copy version of the source volume according to the copy record;

establishing a new replication record descriptive of the new copy version of the source volume;

comparing the new replication record to the current replication record; and

breaking a copy pair for a removed source volume present in the current replication record, but not present in the new replication record.

21.   (Canceled)

22.   (Canceled)

23.   (Canceled)

24.   (Original) The computer readable storage medium of claim 20, wherein the method further comprises maintaining a previous replication record descriptive of a previous copy version.

25.   (Original) The computer readable storage medium of claim 20, wherein the method further comprises maintaining a previous pre-pairing record descriptive of a previous copy version.

26.   (Original) The computer readable storage medium of claim 20, wherein the method further comprises creating the future pre-pairing record.

27.   (Original) The computer readable storage medium of claim 20, wherein the method further comprises locating a target volume available for use to create a copy version of the source volume.

28.   (Original) The computer readable storage medium of claim 20, wherein the method further comprises verifying the future pre-pairing record, accounting for a change in one of a source pool and a target pool.

29.   (Original) The computer readable storage medium of claim 20, wherein the method further comprises verifying the current replication record, accounting for a change in one of a source pool and a target pool.

30.   (Currently amended) A method for managing multiple copy versions of a source volume, the method comprising:

maintaining a current replication record descriptive of a current copy version of a source volume;

maintaining a future pre-pairing record descriptive of a future copy version of the source volume; ~~and~~

creating a copy record from a pre-copy record, the pre-copy record comprising one of the current replication record and the future pre-pairing record[[.]];

<u>replicating the source volume on a target volume, creating a new copy version of the source volume according to the copy record;</u>

<u>establishing a new replication record descriptive of the new copy version of the source volume;</u>

<u>comparing the new replication record to the current replication record; and</u>

<u>breaking a copy pair for a removed source volume present in the current replication record, but not present in the new replication record.</u>

31.   (Currently amended) A method for managing multiple copy versions of a source volume, the method comprising:

maintaining a current replication record descriptive of a current copy version of a source volume;

maintaining a future pre-pairing record descriptive of a future copy version of the source volume;

creating a copy record from a pre-copy record, the pre-copy record comprising one of the current replication record and the future pre-pairing record;

replicating the source volume on a target volume and create a new copy version of the source volume according to the copy record;

establishing a new replication record descriptive of the new copy version of the source volume;

maintaining a replication record descriptive of a previous copy version; and

verifying the pre-copy record, accounting for a change in one of a source pool and a target pool[[.]];

replicating the source volume on a target volume, creating a new copy version of the source volume according to the copy record;

establishing a new replication record descriptive of the new copy version of the source volume;

comparing the new replication record to the current replication record; and

breaking a copy pair for a removed source volume present in the current replication record, but not present in the new replication record.

32.   (Original) An apparatus for managing multiple copy versions of a source volume, the apparatus comprising:

means for maintaining a current replication record descriptive of a current copy version of a source volume;

means for maintaining a future pre-pairing record descriptive of a future copy version of the source volume; and

means for creating a copy record from a pre-copy record, the pre-copy record comprising one of the current replication record and the future pre-pairing record[[.]];

replicating the source volume on a target volume, creating a new copy version of the source volume according to the copy record;

establishing a new replication record descriptive of the new copy version of the source volume;

comparing the new replication record to the current replication record; and

breaking a copy pair for a removed source volume present in the current replication record, but not present in the new replication record.